

Experimental Protocol: Belief Perseverance

[Moti Nissani](#)

Alternative Names (to belief perseverance): Conceptual conservatism; when theory fails; cognitive inflexibility, resistance to conceptual change.

Belief Perseverance Experimental Protocol: Two major impediments on the road to rationality and human progress are closed-mindedness and belief perseverance. Indeed, most of us refuse to genuinely listen to anything that undermines our convictions. When we do, or forced to, listen, and even if provided with overwhelming contrary evidence, we still cling to these convictions. So, once we acquire beliefs about politics, religion, spirituality, or science, we tend to forever remain faithful to them. One of the most convincing laboratory demonstrations of belief perseverance is captured in the first three articles below. Given the importance of this subject, these experiments ought to be replicated and extended. As well, something like these experiments should be routinely used in the classroom to help sensitize students to their irrationality and help them overcome it (see third article below)—at least by educators who are committed to helping their charges become freer and wiser. It is for these two reasons that the 1989 protocol of our belief perseverance experiments is reproduced here:

[0 - Experimenter's Instructions for Two Lab Sessions](#)

[00 - Phone Recruitment](#)

[01 - Session I, Handout 1, Welcome](#)

[02 - Session I, Handout 2, Preliminary Assessment](#)

[03 - Session I, Handout 3-Rediscovery Approach](#)

[04 - Session II, Handout 1, Recall Appraisal](#)

[05 - Session II, Handout 2, Rediscovery](#)

[06 - Session II, Handout 3, Second Ball](#)

[07- Session II, Handout 4, Debriefing](#)

Variations of the above manual have been used in the following experiments:

--[An Experimental Paradigm for the Study of Conceptual Conservatism and Change](#) (first preliminary study, PDF).

-- [Cognition & Instruction Essay](#). (The complete study of 19 science Ph.D.'s., and its astounding, scarcely credible, demonstration that we tend to cling to spurious convictions, despite conclusive hands-on proofs to the contrary, and that in the process of doing so, we can even force our very observations into the Procrustean Bed of our convictions.

--[A hands-on instructional approach to the conceptual shift aspect of scientific discovery](#). *Journal of College Science Teaching* 19: 105-107 (1989). (People can be helped to overcome belief perseverance)

More general papers related to Belief Perseverance:

--[Belief Perseverance: An Understated Variable in Human Affairs?](#) (an informal exploration of the devastating impact of conceptual rigidity in human affairs: "When faced with choice between changing one's mind and proving there is no need to do so, almost everyone gets busy on the proof"--John Kenneth Galbraith)

--[Belief Perseverance in Literature](#)

--[Milgram: A Cognitive Reinterpretation](#) (an article arguing that Milgram's interpretation of his wonderful experiments may be mistaken, and that obedience may be just one more manifestation of the "when-theory-fails" principle.)

[The Plight of the Obscure Innovator in Science](#) (A cautionary historical tale for young scholars or artists who think they have a chance of making great discoveries. No one, my friend, will beat a path to your door--unless you are well-connected. If you are one of those rare people who will not play the political game, your only likely reward will be the elation of the search and discovery, and the hope that you have done something meaningful with your life.)

[The Mendelian Paradox](#) (Mendel most likely did fudge his data--and had every right to, given the sorry record of the history of science)

[Moti Nissani's Webpage](#)